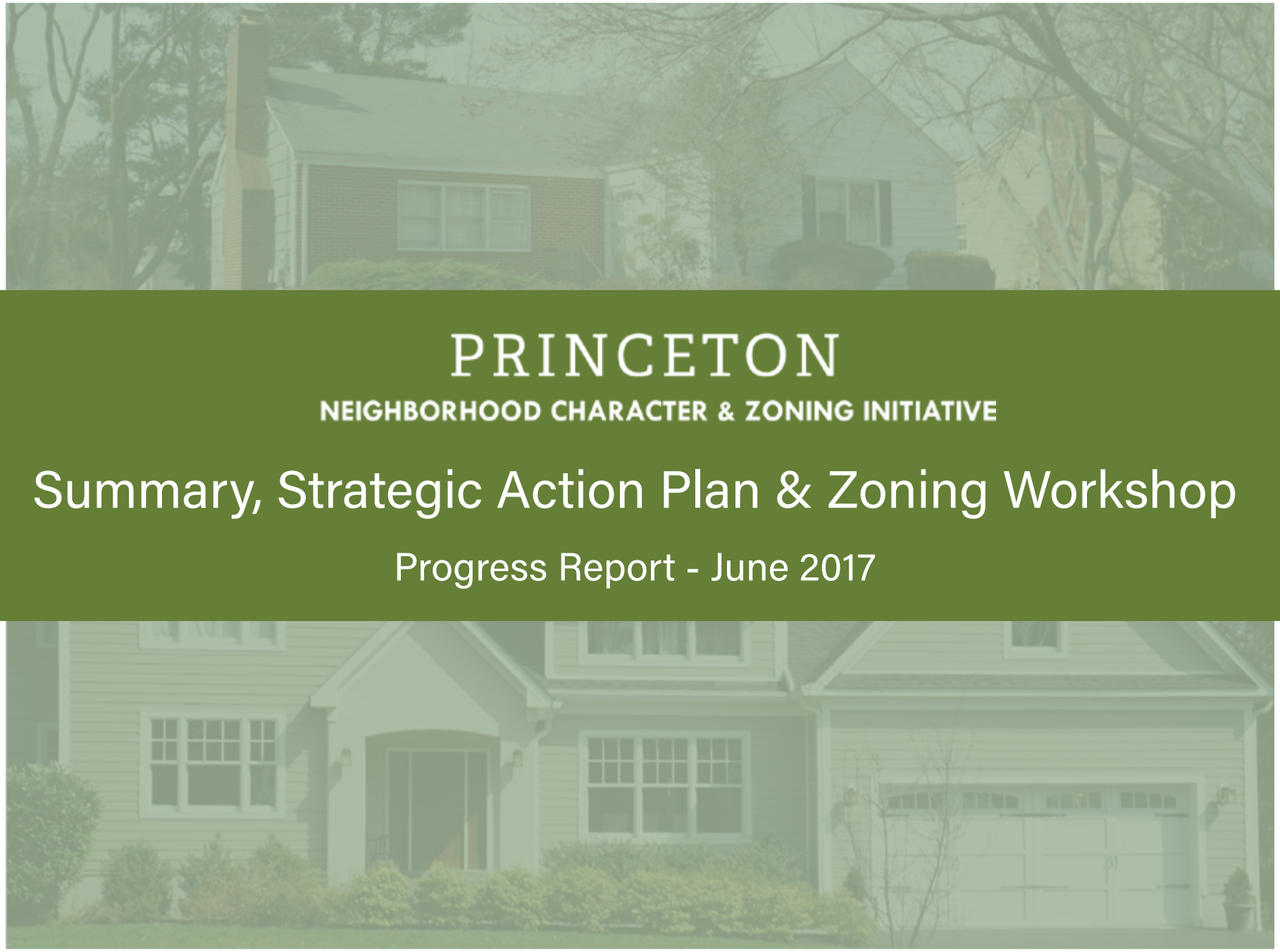

PRINCETON

NEIGHBORHOOD CHARACTER & ZONING INITIATIVE

Summary, Strategic Action Plan & Zoning Workshop

Progress Report - June 2017


Welcome to
PRINCETON
Settled 1683

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Introduction

The Princeton Neighborhood Character and Zoning Initiative is a community planning effort created in response to concerns among many residents about the impacts of home development activities on the character of their neighborhoods. The goal of this initiative is to create strategies, policies, guidelines, and regulations that will shape future home development activities so their outcomes better complement the traditional character and form of Princeton's residential neighborhoods and streets. In creating a venue for public participation and discussion, associated community values and concerns will be identified, including—but not limited to—impacts on adjacent properties and the local environment, the affordability of housing, and the aspirations of homeowners.

This initiative will recommend a range of short-, mid-, and long-term actions for implementation:

Short-term actions, which are expected to be adopted within the next 4 months, could include "quick-fix" revisions or adjustments to site plan review and zoning standards that will lead to improved outcomes from the demolition of older houses and the siting, design, and construction of new houses and yards.

Mid-term actions, which could be implemented within 6-8 months, might include master plan amendments and additional zoning adjustments that set the stage for more significant changes that would be implemented in the long-term.

Long-term actions, such as substantial changes to residential zoning, could be implemented within 10-12 months, while other measures or tools might require further investigation or study.

Figure 1: An example of a small house built in Princeton after WWII.

This report, produced by NV5 (formerly The RBA Group), summarizes the work undertaken over the last 10-12 months, under the supervision of the Planning Department and the direction of an Ad Hoc Task Force consisting of the following Princeton officials:

- **Liz Lempert**, Mayor & Planning Board Member
- **Jenny Crumiller**, Council & Planning Board Member
- **Wanda Gunning**, Chair, Planning Board
- **Tim Quinn**, Planning Board Member & Chair, Zoning Amendment Review Committee (ZARC)
- **Gail Ullman**, Vice Chair, Planning Board & Chair, Master Plan Committee

Most critical, this report presents a **Strategic Action Plan** with detailed guidance for the various actions recommended for implementation and a **Zoning Workshop** section for considering next-step zoning revisions.

Context Summary

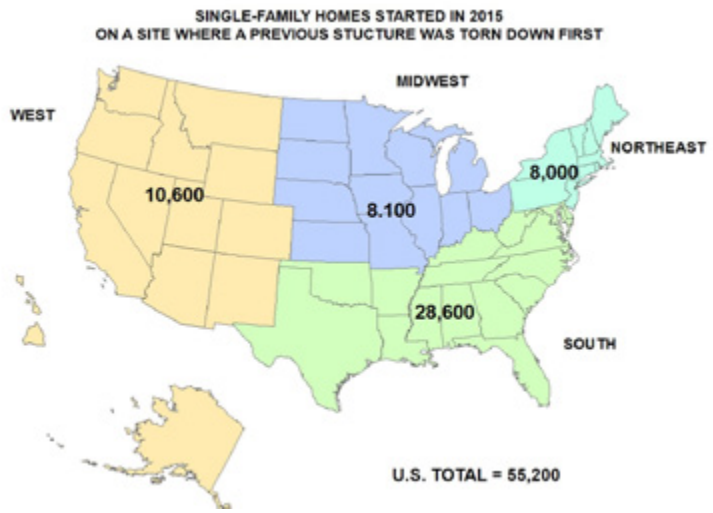
One of the first tasks was to research and review examples from other communities of what is commonly called the "teardown" phenomenon. Princeton is not alone in seeing residential neighborhoods changing through additions to or demolition of older homes and the development of new, larger homes. This trend has been playing out throughout the country, from Seattle to Minneapolis and the Boston suburbs. However, the volume of demolition in other many parts of the country is greater and started earlier than in Princeton.

Places experiencing teardowns typically are older, established neighborhoods within a city or older suburbs located near a city. In some cases, like Princeton and Wellesley, MA, such neighborhoods are part of a university community and in a region with a strong employment base.

A driving force behind teardowns is that the land in such places is often more valuable than the houses that sits on the land, which is the case in Princeton. Homebuyers with means are attracted to the proximity and conveniences of the city and the character of the built-out suburbs, but they also typically want more space in their homes. Renovating an older, smaller home can be more expensive than demolishing the house and building a new one in its place. In such cases, it makes more economic sense to demolish the old, small house and build a new, large house. The negative impacts of this trend result from zoning codes not being adequately up-to-date and calibrated to moderate such changes.

The research also indicates that there is no "quick-fix" for addressing teardowns. It is a long-term process that involves testing various planning and zoning initiatives. Furthermore, communities should keep a broad perspective, looking at not only at remedies to the impacts of teardowns and additions, but also planning for the future stability and success of neighborhoods in a time of shifting demographics and preferences.

Figure 2:



The "Research" section of **www.princetonneighborhoods.org** provides links to "teardown" and neighborhood character references including news articles, reports, studies, and ordinances from other communities. Alexandria, VA, Austin, TX, and Newton, MA have made available information about their processes and solutions for addressing the impacts of teardowns and preserving aspects of neighborhood character.

It is important to keep in mind that Princeton is subject to the State of New Jersey's Municipal Land Use Law (MLUL), which specifies the powers municipalities have to regulate land use. Powers that are permitted in other states, such as site plan review of new single family homes, development delays, and moratoria on demolitions or development, are not permitted by the MLUL. The "Research" section of the website includes articles and ordinances from NJ towns such as Tenafly, Sea Isle City, and Sayreville, which have made zoning changes to address demolitions and neighborhood character, that might be useful for Princeton to consider.

Figure 3: House demolition statistics from the City of Nashville, TN

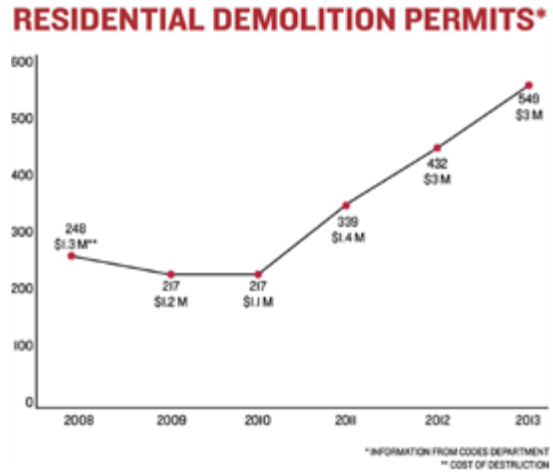
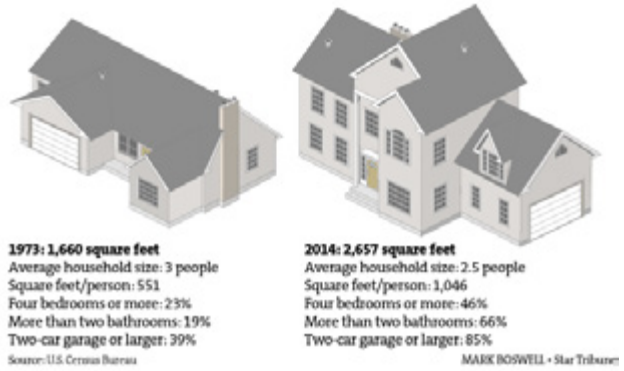


Figure 4: House size comparisons



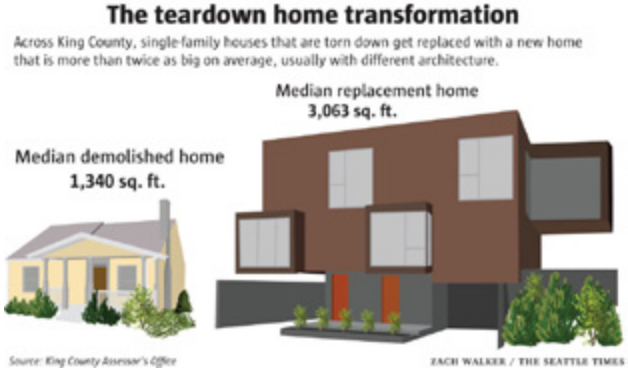


Figure 5: New homes constructed in place of older, smaller homes in St. Paul, MN.

Data & Impacts Summary

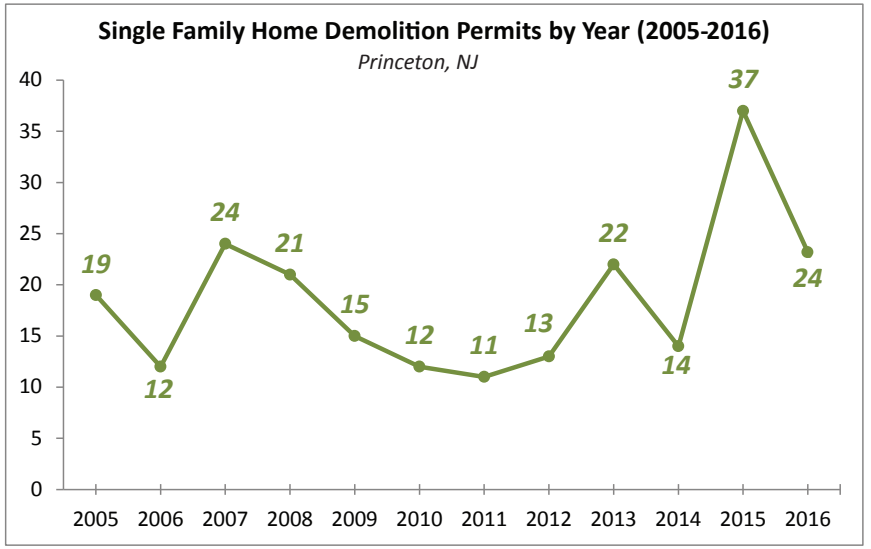
Working with the Planning and Building Departments, NV5 staff collected building demolition permit data and home additions data from 2005 to 2016 and converted it into a format suitable for importing into GIS. A series of maps was generated, including the ones on this page and on the opposite page, to communicate the geographic distribution of single family home demolitions and additions in Princeton. The maps reveal several clusters of demolition activity within the municipality, which also, generally, are areas of significant home additions and renovations. The map on the next page also includes zoning districts of the former Borough and Township, which helps pinpoint the zoning districts that might requires the most significant changes.

The impacts of home demolition involve environmental (e.g., solid waste, stormwater), visual, aesthetic, social, and economic topics and concerns. Urban Partners examined some of the economic impacts of demolition and new development in Princeton's neighborhoods. Available home sales transaction data from 2013 to 2016 revealed that most demolitions are being initiated by developers. The following are the types of transactions and quantities of each type:

- Developer buys old, demolishes, builds, sells (83 homes)
- New homeowner buys old, demolishes, builds (47 homes)
- Developer buys old ... not yet complete or sold (27 homes)
- Long-time homeowner demolishes old, rebuilds (7 homes)

Urban Partners conducted a preliminary assessment of probable fiscal and socioeconomic impacts. Considering that, in general, demolitions are resulting in a 3- or 4-bedroom house being replaced by 4- or 5-bedroom house, the yield would be approximately 0.3 school children per new house, or 1 school child per every 3 or 4 new house.

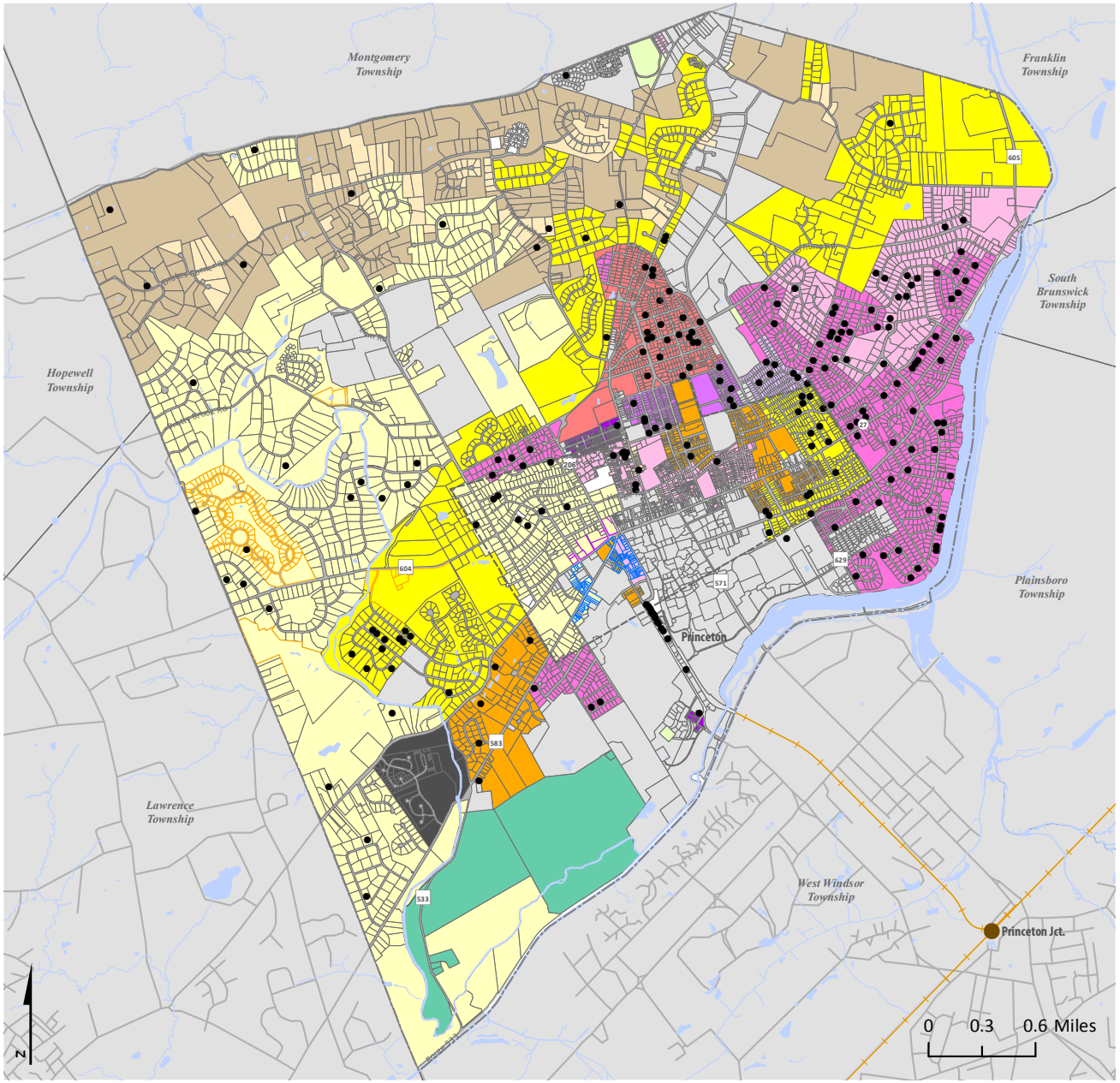
Figure 6:



GIven the purchase price for older houses ranged from $550,000 to $630,000 and the sales price for a new house ranged from $1.3 million to $1.5 million, the increase in tax assessment was approximately $16,000 per new house. Using these same sales prices provides a sense of the affordability of new homes. It is estimated that an older house would require a minimum annual household income of $100,000 to $115,000 to purchase. A new house would require a minimum annual household income of approximately $285,000 to purchase, or higher if through FHA. Basically, this means that a family has to make more than approximately $285,000 a year in order to be able to purchase a new house.

Figure 7:

LOCATION OF SINGLE-FAMILY HOME DEMOLITIONS & ZONING DISTRICTS - PRINCETON, NJ (2005-2016)*



Legend

Township Zoning	Borough Zoning
Non-Resi	Non-Resi
R1	R01P
R104; R190	R1
R1AH	R1HP
R1R2	R1MP
R2	R2
R2AH	R3
R3	R3JP
R4	R3MP
R5	R4
R6	R4MP
R7	R5
R8	R9
R9	RB
RA; RAB; RAOR	
RB; RBOR	
RH/8; RH/12	
RHFW	
RM	

- Railroad
- Demolition Permits (2005-2016)*
- Former Princeton Borough
- Train Station

* Includes demolitions through July, 2016

Client: Princeton, NJ
Produced by: The RBA Group
Date: September 2016
Source: Building Department

Field Work & Zoning Analysis Summary

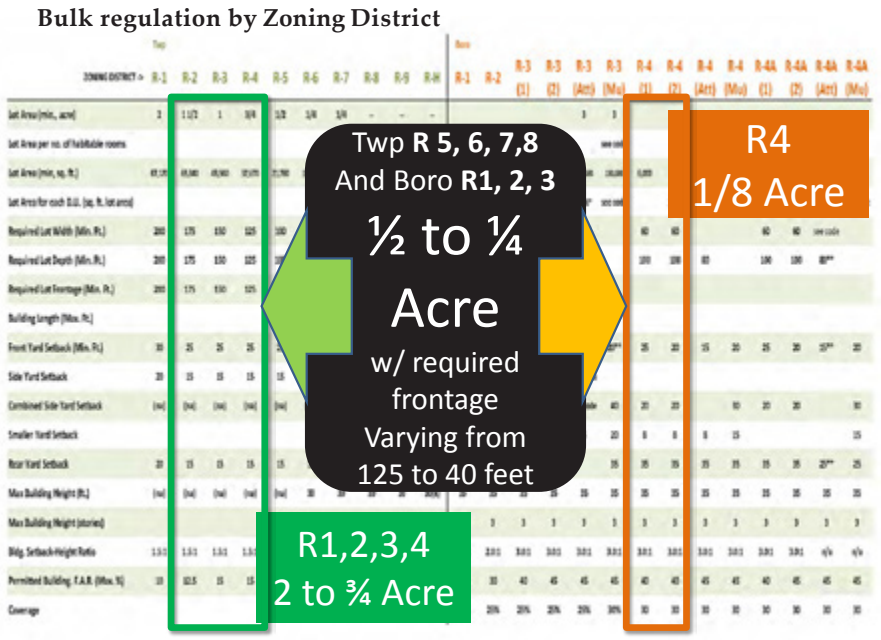
NV5 staff traveled through Princeton's neighborhoods to get a sense of their characteristics and observe the outcomes of new homes. Some areas are witnessing houses being torn down and replaced by new houses that appear to:

- be uncharacteristically large for the block
- eliminate the preexisting tree canopy on the lot
- be surrounded by more paved surfaces than necessary
- diminish the character of the street with dominant garage and auto entry

To get a better picture of prevailing character and zoning, NV5 examined representative sections (typically a 1,000 ft. x 1,000 ft. section) spanning several blocks for each residential zoning district where there has been significant redevelopment activity and prepared a prevailing characteristics survey showing dimensional characteristics along with aerial imagery, photographs, and a table comparing character with current zoning (see Figure 8 and Figure 9).

The consultants also compared what's actually on the ground with the Borough and Township ordinances. There is significant non-conformity and variation from the zoning standards.

Figure 8:



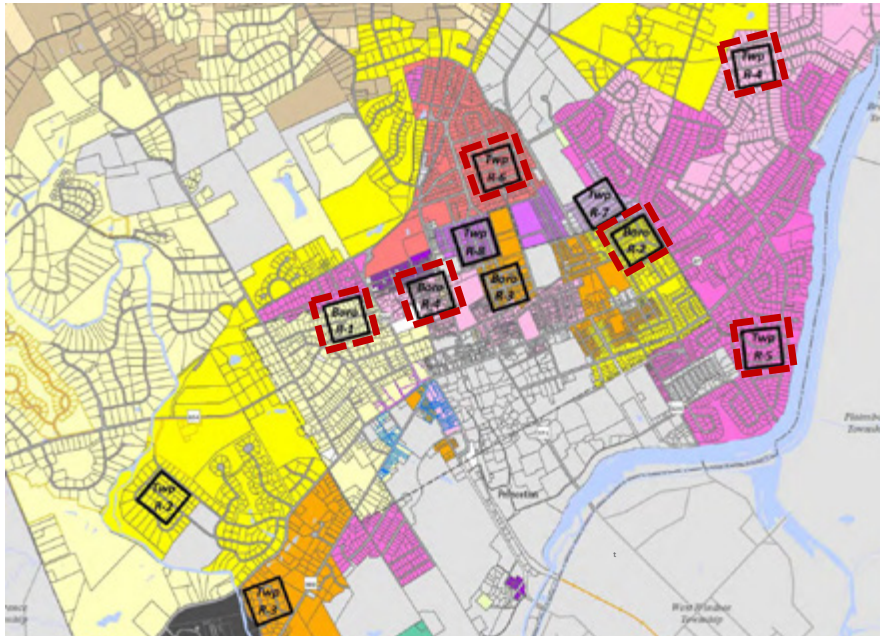
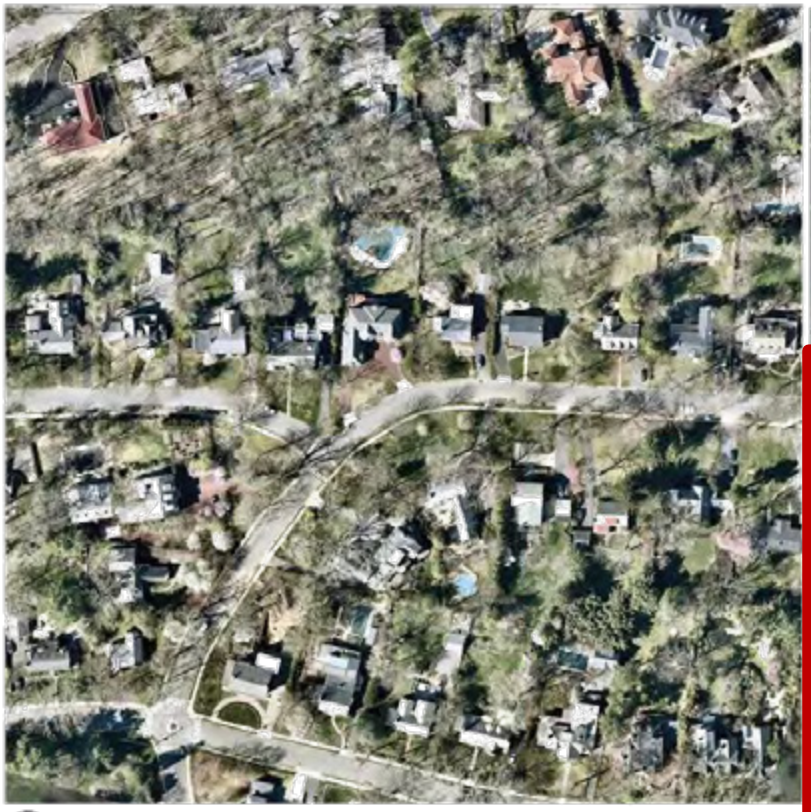


Figure 9:

PREVAILING CHARACTERISTICS Survey by ZONING DISTRICT



QUADRAT/Sample: **R-1 (BOROUGH)**

	CURRENT ZONING	CURRENT CHARACTER Min - Max / **Typical**
LOT AREA (min., s.f.)	20,000	10,000 - 45,000 / **20,000**
LOT WIDTH (min., ft)	125'	85' - 330' / **100'**
LOT DEPTH (min., ft)	125'	150' - 280' / **200'**
LOT FRONTAGE (min., ft)	NA	85' - 330' / **100'**
FRONT SETBACKS (min., ft)	35'	40' - 120' / **40'**
SIDE SETBACKS (min., ft)	10'	10' - 45' / **25'**
COMBINED SIDE YARD SETBACK	30'	20' - 75' / **45'**
SMALLER YARD SETBACK	10'	10' - 25' / **15'**
REAR YARD SETBACKS (min., ft)	35'	30' - 180' / **110'**
COVERAGE (max., %)	25%	
FAR (max., %)	25%	
BLDG. FOOTPRINT	NA	2,000 - 5,500 / **2,500**
BLDG. HEIGHT (max, ft / stories)	35' / 3	2 - 2.5 stories
BLDG. SETBACK-HEIGHT RATIO	1.5:1	
FRONT PARKING SETBACK	NA	
SIDE PARKING SETBACK	NA	
REAR PARKING SETBACK	NA	
REQUIRED PARKING SPACES PER D.U.	2	

PRINCETON NEIGHBORHOOD CHARACTER & ZONING INITIATIVE

Princeton's Residential Zoning Districts

Figure 10 organizes and presents the major dimensional zoning standards for single-family residential districts in both the Township and the Borough. The table was created to more easily compare various standards among zoning districts. The table also demonstrates the challenges of trying to consolidate the codes of the Township and Borough. Combining the fieldwork with an examination of zoning reveals the following:

- In some residential districts there are substantial differences in the provisions of the code and the prevailing pattern of building, streets, and lot configurations.
- There are residential zoning districts in the Borough and Township with a preponderance of nonconforming lots. The Zoning Board of Adjustment has shared the observation with municipal leadership and anticipates amendments to better align zoning regulations with prevailing building and lot configurations.
- There are residential zoning districts with substantial latent development capacity, which means that the municipal zoning ordinances describe building dimensions, uses and/or lot configurations that are profoundly different (and greater) than what is common in the district. This could indicate one of the following:
  - Public policy anticipates or encourages profound change in the character of those streets, neighborhoods, and building groupings.
  - Zoning regulations are out of alignment with the physical form of the districts and should be evaluated and corrected.
  - The municipality is ambivalent, within certain parameters, and is taking a laissez-faire position to ease the regulatory burden on homeowners and developers to encourage investment.

THE UNIVERSITY & THE HOUSING MARKET

Princeton University has an impact on the municipality's and region's housing market by virtue of its more than 1,200 faculty, 6,000 employees, and student body. The University also provides homeownership programs and resources to assist eligible faculty and staff with the purchase of residences close to campus. The incentives provided include: direct purchase of homes near in the former Gray Farm and Broadmead neighborhoods at a fair-market value-based price from the University, with option to repurchase under conditions; favorable mortgage rates and terms to eligible faculty and staff to purchase homes within a 9-mile radius of Nassau Hall or in Trenton; and a "tenancy-in-common" program whereby eligible faculty and staff enter into a co-ownership agreement with the University to purchase residences within a 9-mile radius of Nassau Hall or in Trenton.

Figure 10:

ZONING DISTRICT ->	Twp R-1	R-2	R-3	R-4	R-5	R-6	R-7	R-8	R-9	R-H	Boro R-1	R-2	R-3 (1)	R-3 (2)
Lot Area (min., acre)	2	1 1/2	1	3/4	1/2	1/4	1/4	--	--	--				
Lot Area per no. of habitable rooms														
Lot Area (min, sq. ft.)	87,120	65,340	43,560	32,670	21,780	10,890	10,890	8,500	6,500	20,000	20,000	10,000		
Lot Area for each D.U. (sq. ft. lot area)													7,200	5,000
Required Lot Width (Min. Ft.)	200	175	150	125	100	85	60	50	40	100	125	75	60	60
Required Lot Depth (Min. Ft.)	200	175	150	125	100	85	60	50	40	100	125	100	100	100
Required Lot Frontage (Min. Ft.)	200	175	150	125	100	85	60	50	40	100				
Building Length (Max. Ft.)														
Front Yard Setback (Min. Ft.)	30	25	25	25	25	25	25	25	25	15	35	30	25	25*
Side Yard Setback	20	15	15	15	15	15	10	8	5	15	10	10		
Combined Side Yard Setback	(na)	(na)	(na)	(na)	(na)	(na)	25	20	15	(na)	30	25	20	20
> Smaller Yard Setback											10	10	8	8
Rear Yard Setback	20	15	15	15	15	15	15	15	15	15	35	35	35	35
Max Building Height (ft.)	(na)	(na)	(na)	(na)	(na)	30	30	30	30	30(k)	35	35	35	35
Max Building Height (stories)											3	3	3	3
Bldg. Setback-Height Ratio	1.5:1	1.5:1	1.5:1	1.5:1	1:1	(na)	(na)	(na)	(na)	(na)	1.5:1	2.0:1	3.0:1	3.0:1
Permitted Building. F.A.R. (Max. %)	10	12.5	15	15	20	25	25	30	35	20	25	30	40	45
Coverage											25%	25%	25%	25%
Usable Open Space per d.u. (sq. ft.)														
Usable Open Space per no. of habitable rooms														
Front Parking Setback	30(b) 30(c)	25(b) 25(c)	25(b) 25(c)	25(b) 25(c)	25(b) 25(c)	25(b) 25(c)	25(b) 25(c)	25(b) 25(c)	25(b) 25(c)	25(b)(1) 25(c)(1)				
Side Parking Setback	20(b) 10(c)	15(b) 8(c)	15(b) 8(c)	15(b) 8(c)	15(b) 8(c)	15(b) 8(c)	10(b) 5(c)	8(b) 4(c)	5(b) 3(c)	15(b)(1) 8(c)(1)				
Rear Parking Setback	20(b) 10(c)	15(b) 8(c)	15(b) 8(c)	15(b) 8(c)	15(b) 8(c)	15(b) 8(c)	15(b) 8(c)	15(b) 8(c)	15(b) 8(c)	15(b)(1) 8(c)(1)				
Required Parking Spaces per d.u.											2	2	1	1.5

Engagement Summary

Residents and other interested stakeholders were provided with several venues to participate:

- Provide comments to the Planning Department through the e-mail address provided at **www.princetonneighborhoods.org**
- Task Force meetings were open to the public and several residents attended meetings
- September 27 Meeting of the Planning Board
- A series of three focus groups held in November.

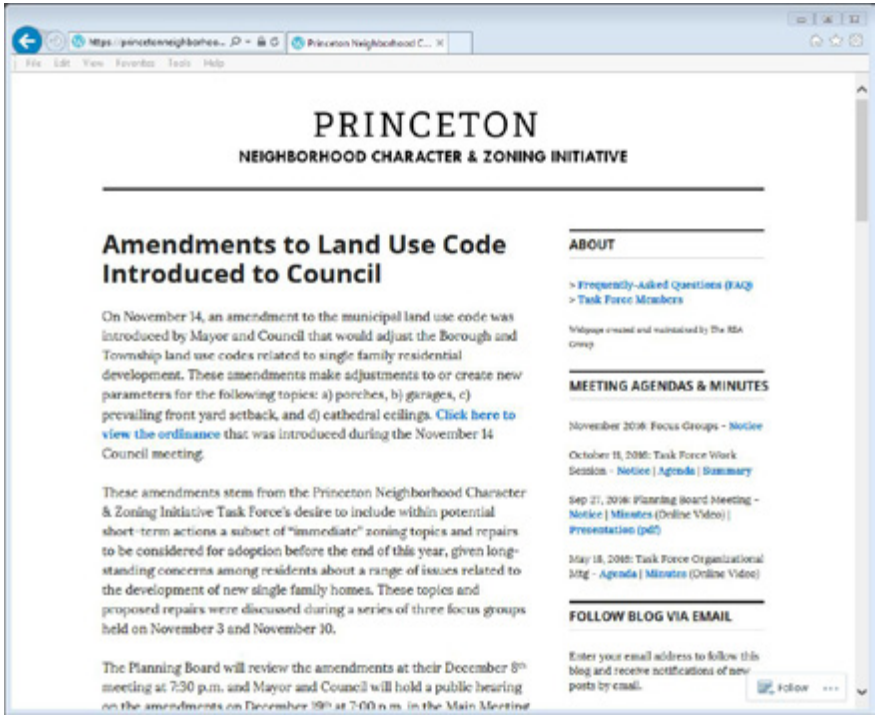
E-mail & Other Public Comments

The comments submitted over e-mail ranged from questions of clarifications and expressions of support for the project to concerns about specific topics such as building materials. A link to a documents containing all of the comments received, in addition to the Planning Department's responses, are provided on the website under the heading "Questions, Comments?" Residents that participated in Task Force meetings underscored the need to continue to reach out to residents and also pay close attention to the topics of drainage and stormwater.

September 27 Meeting

At the September 27 meeting, the consultants narrated a presentation to share with participants the progress of their work, including the collection and analysis of single family home demolition/addition data. The comments from participants demonstrated that residents are certainly aware and concerned about the immediate impacts of new home construction in their neighborhoods, but are also pragmatic and concerned

Figure 11: The website at www.princetonneighborhoods.org



with broader implications. To the right is a summary of comments from participants demonstrating a wide range, form very specific points to "big picture" topics and questions.

Focus Groups

The Task Force convened three focus groups that would take place in the beginning of November. The objectives of the task forces were twofold. The first objective was to "troubleshoot" and discuss the short-term "quick-fix" topics proposed for zoning repairs before 2016. The text box on the opposite page describes these. The second objective of the focus groups was to initiate a broader discussion of longer-term, big-picture

SUMMARY OF COMMENTS FROM 9/27 MEETING

BIGGER PICTURE

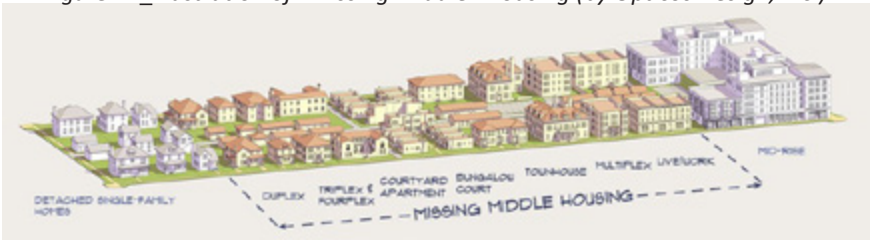
- *Provide design guidance on additions and on solar PV installation.*
- *Making an addition to a house can be more expensive than full demolition and rebuild.*
- *Encourage historically appropriate additions.*
- *Application for demolition should have detailed plans submitted structure that will replace it.*
- *Keep setbacks consistent on blocks.*
- *Permit only natural hedges in front yards (e.g., shrubs), no fences.*
- *Garage doors should be restricted to occupying only a certain percentage of the façade.*
- *Princeton properties don't match the zoning. Most were developed before zoning.*
- *Consider shared driveways.*
- *What does prevailing character mean when half of the homes on a block are new?*
- *Consider potential bike/ped linkages in conjunction with redevelopment on large lots.*
- *Support efforts to make Princeton affordable to various income levels.*
- *We should allow for change in the ways we live and our preferences, which are not the same as in the past.*
- *We are currently incentivizing building huge houses on large lots. Consider density bonuses to encourage duplexes.*
- *We need to think about the vision of the future of our neighborhoods first.*

THE "MISSING MIDDLE"

In the face of larger houses and escalating home prices, many Princeton residents who participated in this process are concerned about maintaining the affordability of its neighborhoods and its accessibility to people and families at various incomes and stages of life.

"Missing middle" is a term coined by Daniel Parolek of Opticos Design, Inc. to define a range of multi-unit or clustered housing types compatible in scale with single-family homes that help meet the growing demand for walkable urban living. Parolek contends that "missing middle" housing is not a new type of building, but rather a range of building types that were fundamental parts of pre-1940s neighborhoods. Combined together—and sometimes even with single-family homes—missing middle housing types can accommodate people at various ages and income levels. Most "missing middle" housing types have smaller unit sizes. The challenge is to create small spaces that are well designed, comfortable, and usable. The ultimate unit size will depend on the context, but smaller-sized units can help developers keep their costs down and attract a different market of buyers and renters who are not being provided for in all markets.

Figure 12: Illustration of "Missing Middle" Housing (by Opticos Design, Inc.).



issues shaping Princeton's neighborhoods.

The three focus groups were organized around the following audiences:

- Design & Real Estate Professionals
- Neighborhood Residents
- Boards & Commissions

Design & Real Estate Professionals

The first focus group was with Design & Real Estate Professionals. This group recognized that, within the context of attempting short-term, "quick fix" zoning repairs, it is difficult to find a "one-size-fits-all" solution. The conversation from the specific topics at hand (garages, porches, etc.) to "big picture" topics, questions, and considerations such as affordability and determining the vision for the future of Princeton's neighborhoods. One of the first steps is to determine what neighborhoods share common characteristics and then formulate actions that address each neighborhood individually. Several participants indicated being receptive to design guidelines or "pattern books," which are advisory in nature.

Neighborhood Residents

Participants in the Neighborhood Residents group tended to be more focused on the individual topics proposed for short-term, "quick fix" zoning repairs. They recognize the realities of modern homebuyers seeking two-car garages but also the importance of not creating "car-first" houses, therefore maintaining a "traditional" pattern of having garages to the rear or side of a house. They also recognize the difficulty in providing garages on narrow lots. This group also touched on a similar issue raised by the Design & Real Estate Professionals: can any proposed change to a zoning topic work across all districts or does there need to be more attention to variation among neighborhoods and districts?

Boards & Commissions

The Boards & Commissions Focus Group, many of whom are acutely familiar with the design details of new single family homes and nuances of how people use them, provided specific guidance on each topic. For example, a porch should be defined carefully as something that is open and stays open. For garages, it was observed that many families with two-car garages park outside and use the garage for storage. On narrow lots, to get out of one's car requires stepping into a neighbor's yard. Places with garages in the back can lead to more impervious surface coverage due to longer driveways. On prevailing setbacks, which the Borough currently has, but not the Township, it was noted that this can be an issue when each time a house is constructed the setback is larger. A maximum setback could be considered along with a minimum setback.

Like the other two focus groups, this group also underscored the need to contextualize zoning changes. Topics might not be adequately addressed across all neighborhoods by a single change or set of changes. Affordability of housing was also raised as an urgent topic, along with the question of whether certain neighborhoods could accommodate multifamily housing and whether parking requirements for a two cars can impact affordability. Another topic considered urgent is increased impervious surface coverage and its impacts on environment and stormwater.

None of the groups felt that creating an ordinance to prevent repetition or duplication of houses would be necessary. Many parts of Princeton contain house styles and designs that repeat and, furthermore, there can be room for variety within a certain level of uniformity.

RESIDENTIAL ZONING "REPAIRS" IN 2016

On November 14, an amendment to the municipal land use code was introduced by Mayor and Council that would adjust the Borough and Township land use codes related to single family residential development. These amendments make adjustments to or create new parameters for the following topics: **porches**, **garages**, **prevailing front yard setbacks**, **cathedral ceilings**, and **driveways**.

These amendments stem from the Princeton Neighborhood Character & Zoning Initiative Task Force's desire to include within potential short-term actions a subset of "immediate" zoning topics and repairs considered to be of the "quick-fix" variety to be introduce for potential adoption before the end of this 2016, given long-standing concerns among residents about a range of issues related to the development of new single family homes. These topics and proposed repairs were discussed during a series of three focus groups held on November 3 and November 10.

Council ultimately adopted three of the five proposed changes: for **porches**, **prevailing front yard setbacks**, and **cathedral ceiling**, requesting the topics of driveways and garages to be examined more comprehensively.

Strategic Action Plan

This section describes the next steps that Princeton should take. While the steps are generally arranged in a temporal sequence, the numbering of each step is really intended to facilitate identification of the steps.

1. Continue Communications & Community Engagement

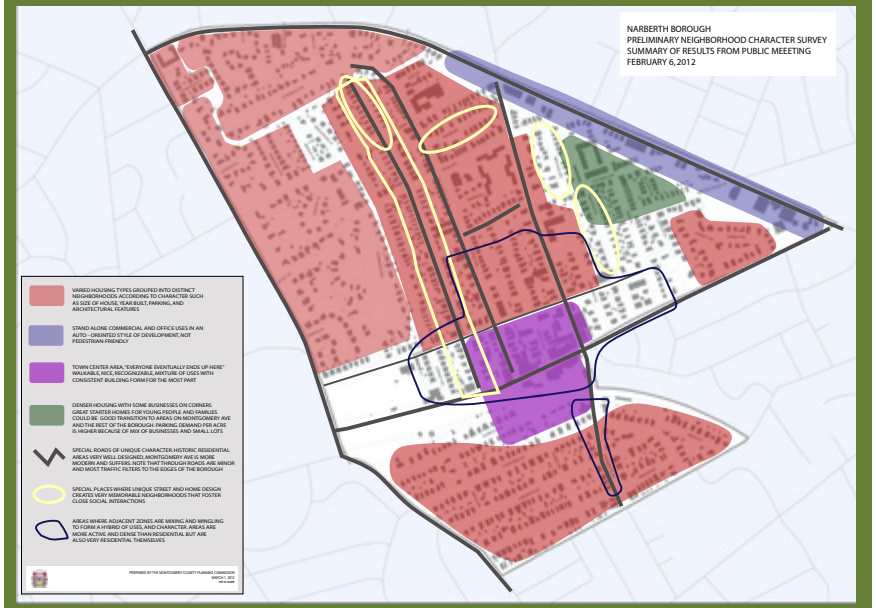
Princeton should continue to use the Web and other means to disseminate information and news about the project. Princeton could consider using the current project website as a primary means of communicating with residents and other stakeholders, continuing to update residents when there is new information to post. The site currently has more than 100 "Followers" who receive notice of updates. More people could be encouraged to "Follow" the site so that they receive a note via e-mail when the site is updated. When press releases are issued, a note could be included that encourages website visitors to "Follow" the website to receive periodic updates.

2. Prepare and Introduce Second Round of Zoning Repairs

The first round of "quick-fix" repairs to the sections of the Borough and Township zoning codes pertaining to residential districts was presented to Council in November 2016. Princeton could consider drafting a second round of amendments to additional features within the zoning codes. For example, these might include topics such as building heights and garages. The Zoning Workshop section of this report identifies several potential topics and examples of ordinances from other communities that could inform Princeton's thinking.

MAPPING NEIGHBORHOOD CHARACTER

The Borough of Narberth, PA embarked on a process to update its zoning regulations through a form-based approach. The small Borough, only 0.5 square miles in area, held several workshops with residents to arrive at ways to organize the Borough based on character. This Neighborhood Character Study resulted in a composite map that identified, in terms of residential character, varied housing types grouped into neighborhoods according to character (based on size, age, parking, architecture). It also highlighted special roads of unique character with historic residential homes and "special places" where unique street and home design created memorable, tight-knit neighborhoods.



3. Undertake "Character Mapping"

As "character" is a central theme of this project, one of the most important actions is to begin to identify the various characteristics of single family residential blocks of Princeton and group them based on common physical and/or historical characteristics.

A exercise could be created for residents themselves to participate in a "character mapping" activity, which could be undertaken online and/or in-person. In composing such a map, a rule of thumb is that lines generally should not be drawn through the middle of streets; homes across the street from each other generally should be grouped together. Within each group, traditional and modern housing types and common architectural, site, yards and landscape features, and street attributes should identified, to the extent possible. Housing types should be further classified according to architectural styles and age, with photos taken of each housing type.

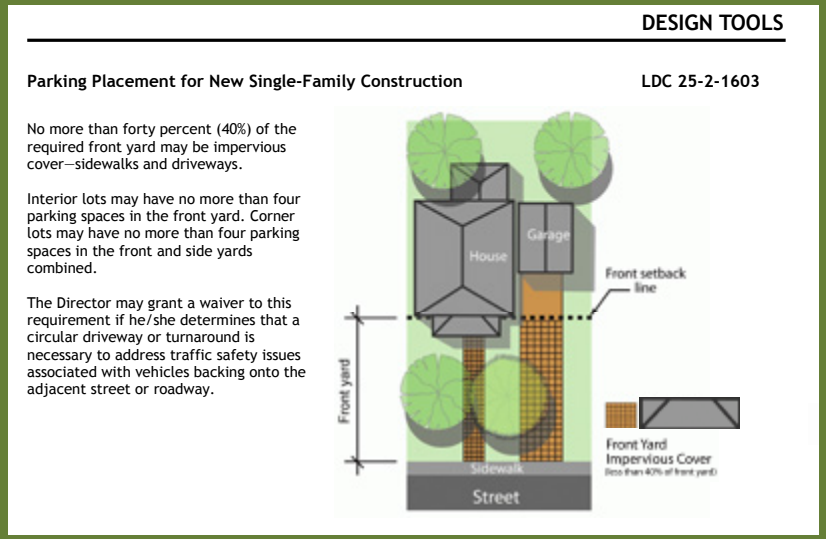
One of the results of this activity would be a composite Character Map along with representative photographs, diagrams, and findings/recommendations. The written and graphic interpretation of these materials could become part of an amendment to the Master Plan's Land Use Element (see #7). Ultimately, this collection of materials represents a first step towards creating a new character-based framework for zoning in Princeton's single-family residential areas.

4. Design and Launch a Visioning Process for Princeton's Residential Neighborhoods

As the Community Engagement section of this report indicates, residents and stakeholders in Princeton recommend looking at the "big picture"—asking the question: what is the vision for the future of Princeton's resi-

NEIGHBORHOOD PLANNING IN AUSTIN, TX

Austin has had a strong neighborhood-level planning focus for several decades and its policy and regulations address "teardowns" and changing neighborhood character at the neighborhood scale. During the neighborhood planning process, a neighborhood is presented with a full menu of infill options and design tools that each may recommend approval of one or more of them. Some of the options may be applied to the entire neighborhood planning area or portions of it (i.e., subdistricts), whereas others must be applied to specific properties. This includes not only certain parking placement and garage standards but also new housing types, such as "granny flats" and duplexes (i.e., "missing middle" housing types)



dential neighborhoods. Ultimately, this vision would need to be reflected in Princeton's Master Plan through an amendment or rewrite process.

From a qualitative standpoint, the results of the community engagement process for this initiative has brought to the surface several priorities and principles for the future of Princeton's neighborhoods, including, among them, maintaining affordability and pedestrian-focused blocks. A carefully designed survey of Princeton residents could bring such priorities and principles into focus and provide a rich body of quantitative and qualitative input that can be the foundation for a municipality-wide visioning process for residential neighborhoods. The survey could also be designed to provide feedback by geography to determine whether certain priorities, principles, or actions are more appropriate or desired in some parts of Princeton than others. Some of the topics could be addressed by the Princeton Neighborhood Character & Zoning Initiative, while other topics could involve other planning processes or actions.

The results of the "Character Mapping" exercise could become another part of the visioning process. The Character Map should be confirmed or revised according to community feedback. Then more detailed discussions could take place around specific sections of the map.

5. Adopt Master Plan Reexamination Report

The New Jersey Municipal Land Use Law (MLUL) requires that each municipality in New Jersey undertake a periodic review and reexamination of its local Master Plan (every 10 years). Princeton's Master Plan is due for a reexamination in 2017. The reexamination report would address all relevant aspects of Princeton, which would include Princeton's residential sections and residential zoning districts.

The purpose of the Reexamination Report is to review and evaluate the master plan and municipal development regulations on a regular basis in order to determine the need for updates and revisions. In addition, the preparation of a statutorily compliant Reexamination Report provides a presumption of validity of the municipal zoning ordinance under the law.

The purpose of the reexamination is to review the progress of the municipality in achieving its planning objectives, and to consider the need for changes in order to ensure that the municipal plan is current and meets the needs of the municipality. The Planning Board is responsible for completing the reexamination, and preparing and adopting by resolution a report on the findings of the reexamination.

The Municipal Land Use Law requires that the reexamination report addresses the following:

- The major problems and objectives relating to land development in the municipality at the time of the adoption of the last reexamination report;
- The extent to which such problems and objectives have been reduced or have increased subsequent to such date;
- The extent to which there have been significant changes in the assumptions, policies and objectives forming the basis for the master plan or development regulations as last revised, with particular regard to the density and distribution of population and land uses, housing conditions, circulation, conservation of natural resources, energy conservation, collection, disposition and recycling of designated recyclable materials, and changes in state, county and municipal policies and objectives;
- The specific changes recommended for the master plan or development regulations, if any, including underlying objectives, policies and standards, or whether a new plan or regulations

should be prepared; and,

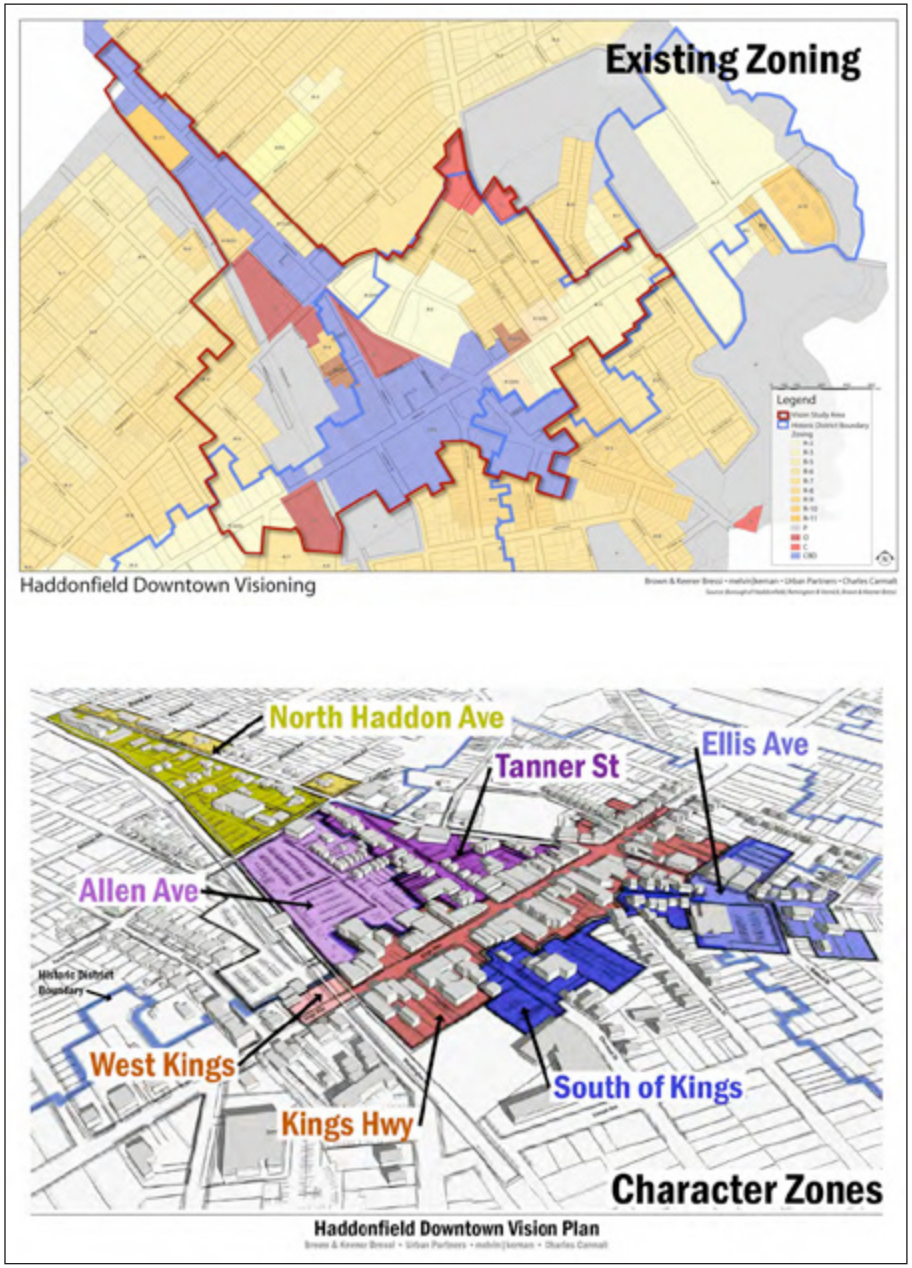
- The recommendations of the planning board concerning the incorporation of redevelopment plans adopted pursuant to the Local Redevelopment and Housing Law (NJSA 40A:12A-l et seq.) into the land use plan element of the master plan, and recommended changes, if any, in the local development regulations needed to effectuate the redevelopment plans of the municipality.

6. Create a "Character District Plan"

The character mapping exercise should lead to a map that identifies potential districts based on shared form and character of houses, streets, yards, etc. At this stage, the districts are precursors to zoning districts. While a "form-based" approach is not being prescribed, elements of this approach to zoning could be considered. For example, the character district plan might include details on where form-based code techniques linked to specific housing types might be appropriate to explore.

Figure 13 shows the Borough of Haddonfield's (NJ) prior, use-based zoning map and its character district plan, or "Character Zones" map. This map, which became part of a Downtown Element of the Borough's Master Plan, presented this new zoning framework. The districts were established to reflect the distinct urban design character of different areas of downtown. These area tend to be defined by the streets that anchor them, such as Kings Highway or North Haddon, or in one case, by a public space, Ellis Triangle. Generally the character of the zones reflects the character of the downtown area and its surroundings—subtle, block-by-block intensification of scale and use until one reaches the "100 percent" corner at Haddon Avenue and Kings Highway. The map also shows small parts at the fringes of downtown that would be rezoned to be compatible with adjacent residential districts, to create a clear transition and buffer.

Figure 13: The Borough of Haddonfield, NJ's prior zoning map (top) and the Character Zones map, a precursor to its new zoning map for downtown.



FORM-BASED CODE

Form-based code is a land development regulation technique that can create more predictable built results and a higher-quality public realm by using physical form, rather than separation of uses, as the organizing principle. In other words, form-based zoning prescribes permitted building types first, then defines permitted uses. This is different from conventional "use-based" zoning and reflects different priorities. "Use-based" zoning is focused on separating uses and assigning different uses to different areas. Form-based zoning, while still regulating uses, is more focused on regulating community form, i.e. the shape of the built outcome. The regulations and standards in form-based codes are presented in both words and clearly drawn diagrams and other visuals. They are keyed to a regulating plan that designates the appropriate form and scale (and therefore, character) of development, rather than only distinctions in land-use types.

- Description adapted from "Form Based Codes in New Jersey," July 2010, Regional Plan Association

New Jersey's Municipal Land Use Law allows municipalities to regulate buildings according to their type (N.J.S.A. 40:55D-65). The Borough of Haddonfield and Town of Hammonton have adopted codes for their downtown areas that use form-based techniques. An excerpt from Haddonfield's code is included in Figure 14 on page 23.

7. Consider Amendments to the Master Plan's Land Use Element

A Master Plan Amendment could take the form of a "Residential Neighborhoods Element" that could be nested within the Land Use Element or as a separate element. The amendment could consist of the following sections:

- Principles, goals, and objectives
- Proposed "character district plan" or "regulating plan"
- Zoning strategy/framework
- Neighborhood design strategy
- Historic preservation strategy
- Environmental/sustainability strategy

Roxbury Township, NJ in Morris County, which is also experiencing teardowns, includes discussion of community character in its Master Plan's Land Use Plan Element Update, which can be viewed online at **www.roxburynj.us/DocumentCenter/View/1211**). This document clearly identifies the issue of residential teardowns and includes a recommendation for and discussion about protecting the character of established neighborhoods in the face of this phenomenon. The Township's Land Use Plan Element Update was informed by a build-out and capacity analysis of existing zoning, environmental constraints, and the Highlands Act. This analysis led to several recommendations for modifying aspects of residential zoning such as lot depth, setbacks, and maximum building coverage, impervious coverage, and building/lot width. It also includes the recommendation to redefine "building height." The recommendations provide specific guidance for each of these aspects of its residential zones. It also introduces the possibility of introducing floor area ratio

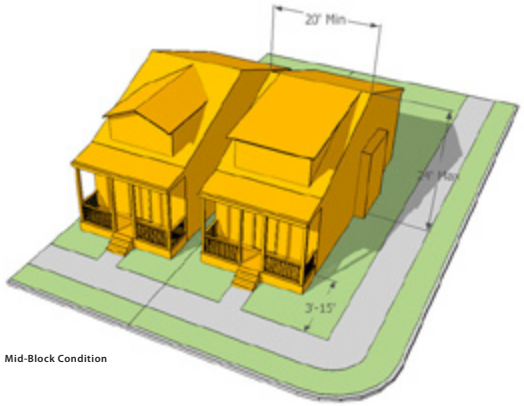
Figure 14: An excerpt from the zoning code for downtown Haddonfield, NJ, which uses form-based techniques, showing regulations for the "Cottage House" building type. The map [under (e) Zone Application] indicates the districts in which this building type is permitted.

(9) Cottage House

CH

(a) Typical Condition / Siting Example

For illustrative purposes only



Mid-Block Condition

End-Unit/Corner Condition

(b) Description

A variant of the Single Family Detached House, with a lower allowable height and smaller side and front setbacks. It is intended for smaller lots.

(c) Local Examples

Cottage Houses are currently seen along Wilkins Avenue and Ellis Street, as well as in many of the residential neighborhoods surrounding Downtown Haddonfield.

(d) Character Examples

Photographs show general principles only and may not meet all standards

(e) Zone Application

D1 D2 D3 ~~D4~~

Cottage House

CH

(f) Building Bulk Requirements

			CH COTTAGE HOUSE
Footprint Area (min/max in sf)			900 / 1,500
Building Width (min/max in ft)			20 / 30
Building Coverage (max %)		D1	50
		D2	50
		D3	*n/a*
		D4	*n/a*
Setbacks	Front (min/max)	D1	10' / 15'
		D2	10' / 15'
		D3	*n/a*
		D4	*n/a*
	Side (min/max)	D1	3' / 15'
		D2	3' / 15'
		D3	*n/a*
		D4	*n/a*
	Rear (min/max)	D1	10' / no max
		D2	10' / no max
		D3	*n/a*
		D4	*n/a*
Height	min / max (stories)	D1	1 / 2
		D2	1 / 2
		D3	*n/a*
		D4	*n/a*
	max (ft)	D1	24
		D2	24
		D3	*n/a*
		D4	*n/a*
Accessory Structure	Max bldg footprint in sf		800
	Max Height		18'
	min/max Setback in ft.	Alley	3' / 5'
		Main Bldg.	6' / no max
		Side Yard	3' / no max
Parking	For Development that is only Residential		1.5/ Unit standard***
	Mixed-Use	Residential	1.5 / Unit
		Commercial	3/1000 sf

NOTES:

*=Special Maximum Height Zone

**=Special Corners are only allowed at three intersections inside of the D4 Zone (See 135-38-17B) and where not noted will follow D4 Bulk Requirements

***=This parking standard for residential development is based on the need to provide flexibility with respect to permitted changes of use, both residential and non-residential, for this structure type within the context of infill development and redevelopment in the Downtown Districts. This standard is consistent with the master plan for the downtown area and with the Parking Standards in §135-38.F. This standard shall be effective if a de minimus exception, waiver or special area standard is granted pursuant to the Residential Site Improvement Standards at N.J.A.C. 5:21-3, otherwise the standards provided in Table 4.4 at

Zone Application

D1 D2 D3 ~~D4~~

(FAR) into residential zoning, but ultimately recommends using " a variety of other mechanisms in order to achieve appropriately scaled development in established residential districts."

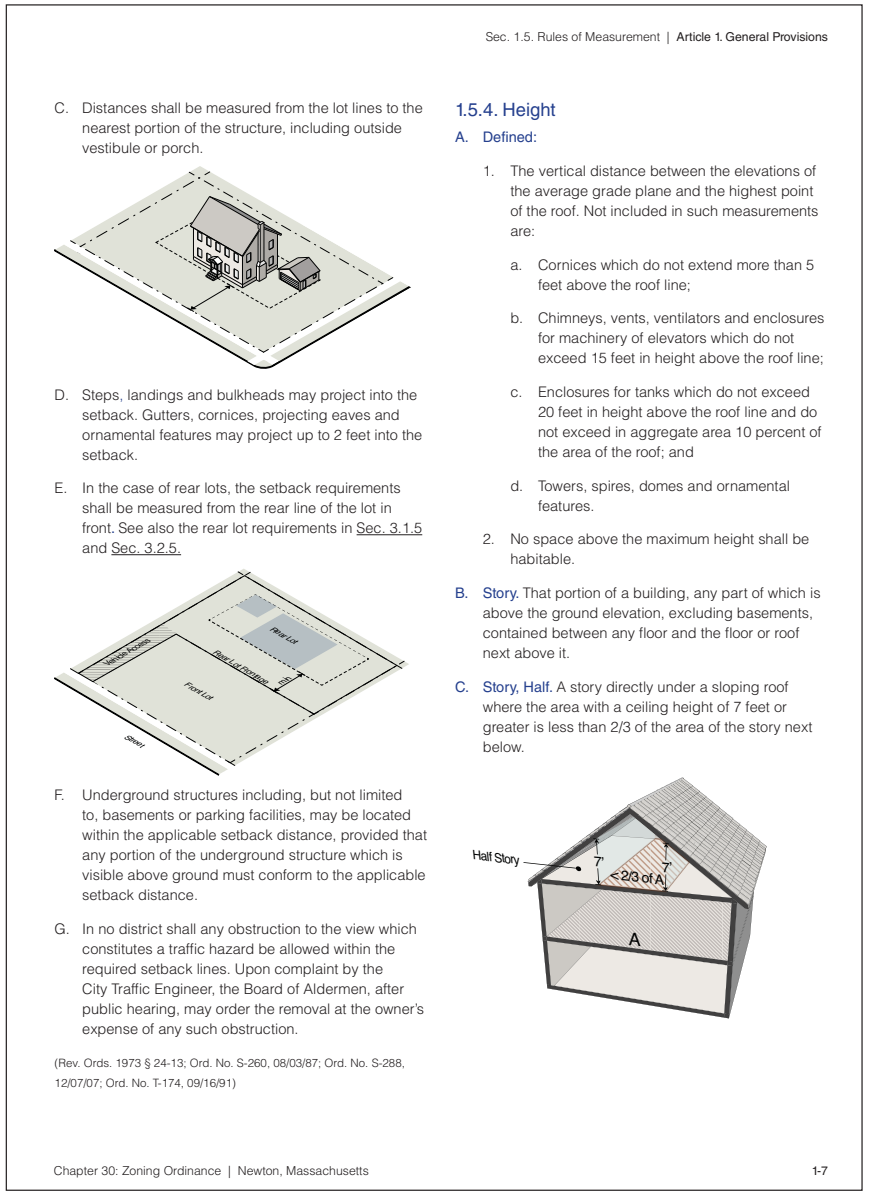
Princeton could follow a similar approach as Roxbury Township, but will need to undertake a deeper analysis to identify and effectuate specific recommendations based on the identification of "character districts" in residential neighborhoods. Princeton also may need to prescribe potential approaches (regulatory and/or non-regulatory) for specific areas.

Seeking to bring current zoning into greater compatibility with established development patterns, West Windsor Township, NJ includes in its Master Plan's Land Use Element a residential land use plan that articulates changes to the zoning district boundaries, the creation of new districts, and presents proposed standards for each district in terms of minimum lot area and other dimensions (see the Land Use Element of West Windsor Township's Master Plan online at **www.westwindsornj.org/MasterPlan/Section%203/Section3.pdf**)

8. Consider Procedural Matters

During the engagement process, residents identified several procedural matters of concern. One matter involves not being able to have a sense of the plans for a new houses nor having enough time to respond to demolitions that are planned within in their neighborhood. Unfortunately, certain procedures are regulated by the State, not the municipality. NJ's MLUL does not allow municipalities to subject the development of a single family home to site plan review and associated standards. Furthermore, the State preempts the municipality from putting into place additional noticing requirements for demolitions. Princeton's Engineering Site Review Application includes, along with a checklist of required items, guidelines and standards for single family site plans.

Figure 15: A page from the zoning code of Newton, MA containing diagrams to illustrate certain zoning parameters.



Sec. 1.5. Rules of Measurement | Article 1. General Provisions

C. Distances shall be measured from the lot lines to the nearest portion of the structure, including outside vestibule or porch.

D. Steps, landings and bulkheads may project into the setback. Gutters, cornices, projecting eaves and ornamental features may project up to 2 feet into the setback.

E. In the case of rear lots, the setback requirements shall be measured from the rear line of the lot in front. See also the rear lot requirements in Sec. 3.1.5 and Sec. 3.2.5.

F. Underground structures including, but not limited to, basements or parking facilities, may be located within the applicable setback distance, provided that any portion of the underground structure which is visible above ground must conform to the applicable setback distance.

G. In no district shall any obstruction to the view which constitutes a traffic hazard be allowed within the required setback lines. Upon complaint by the City Traffic Engineer, the Board of Aldermen, after public hearing, may order the removal at the owner's expense of any such obstruction.

(Rev. Ords. 1973 § 24-13; Ord. No. S-260, 08/03/87; Ord. No. S-288, 12/07/07; Ord. No. T-174, 09/16/91)

1.5.4. Height

A. Defined:

1. The vertical distance between the elevations of the average grade plane and the highest point of the roof. Not included in such measurements are:
   a. Cornices which do not extend more than 5 feet above the roof line;
   b. Chimneys, vents, ventilators and enclosures for machinery of elevators which do not exceed 15 feet in height above the roof line;
   c. Enclosures for tanks which do not exceed 20 feet in height above the roof line and do not exceed in aggregate area 10 percent of the area of the roof; and
   d. Towers, spires, domes and ornamental features.
2. No space above the maximum height shall be habitable.

B. Story. That portion of a building, any part of which is above the ground elevation, excluding basements, contained between any floor and the floor or roof next above it.

C. Story, Half. A story directly under a sloping roof where the area with a ceiling height of 7 feet or greater is less than 2/3 of the area of the story next below.

Chapter 30: Zoning Ordinance | Newton, Massachusetts 1-7

9. Create a New, Consolidated Residential Zoning Ordinance

The former Borough and Township codes will be integrated into one unified zoning ordinance. This could happen in two steps, with the first step being to merge the existing codes to the greatest extent possible and the second step being to rewrite and reformat the code according to an amended Master Plan Land Use Element. However, it could be more efficient to wait to consolidate the code once an amended Master Plan Land Use Element is adopted. On the other hand, the integration of the codes and the amending of the Land Use Element could occur on parallel paths. Ultimately, the code should be formatted in a clear, legible manner and include diagrams to demonstrate specific principles and standards. Figure 15 is a part of the zoning bylaws of Newtown, MA that includes diagrams that help visually explain the intent of the zoning text.

10. Consider Historic District(s)

Historic district controls might be appropriate for certain residential sections of Princeton. The potential for using this regulatory tool would be expressed in an amendment or update to the Master Plan's Land Use Element and detailed in an amendment to the Historic Preservation Element. A study would need to be conducted in order to initiate the process toward designating an historic district. The Witherspoon-Jackson Neighborhood is the most recent neighborhood in Princeton to be designated a historic district. It is classified as a "Type 2" historic district, which requires preservation plan review for proposed work that is visible from a public right-of-way.

11. Consider Design Guidelines

Design guidelines convey general policies about the form and design of alterations to existing structures, additions, new construction, and site work. In residential areas, design guidelines can recommend architectural styles and details based on traditional or vernacular architecture (see Figure 17). They can also focus more broadly on the desired characteristics of blocks and districts. Design guidelines do not have the regulatory powers of zoning. However, they can complement zoning by defining a range of appropriate or favorable responses to architectural form and design issues. Communities have created design guides called "pattern books" to communicate architectural and design intent to homeowners, offering a menu of options and alternatives based on various conditions. For example, the City of Norfolk, VA used pattern books extensively as part of a broader effort to attract new homeowners while ensuring the preservation of neighborhood character. Figure 16 on page 26 is a page from Norfolk's Cottage and Ranch Plan Book that provides advice on how to modernize and add an additional floor to a typical ranch house.

Norfolk also has a pattern book focusing on neighborhoods (see Figure 18 on page 27). Three neighborhoods were identified based on architectural styles, lot patterns, streetscape character and landscape character. The method that Norfolk used to select the three neighborhoods could inform the character mapping process described in #2.

An article from The Washington Post ("Pattern book revival helps homeowners recover best of the past" from March 12, 2006) reports the pattern books were used to build or rebuild more than 240 houses in the first three years after they after they were created. Norfolk's Neighborhood Patterns and Plans Books can be viewed online at **www.norfolk.gov/Index.aspx?NID=1086**.

Figure 16: A page from the Norfolk, VA Cottage and Ranch Plan Book

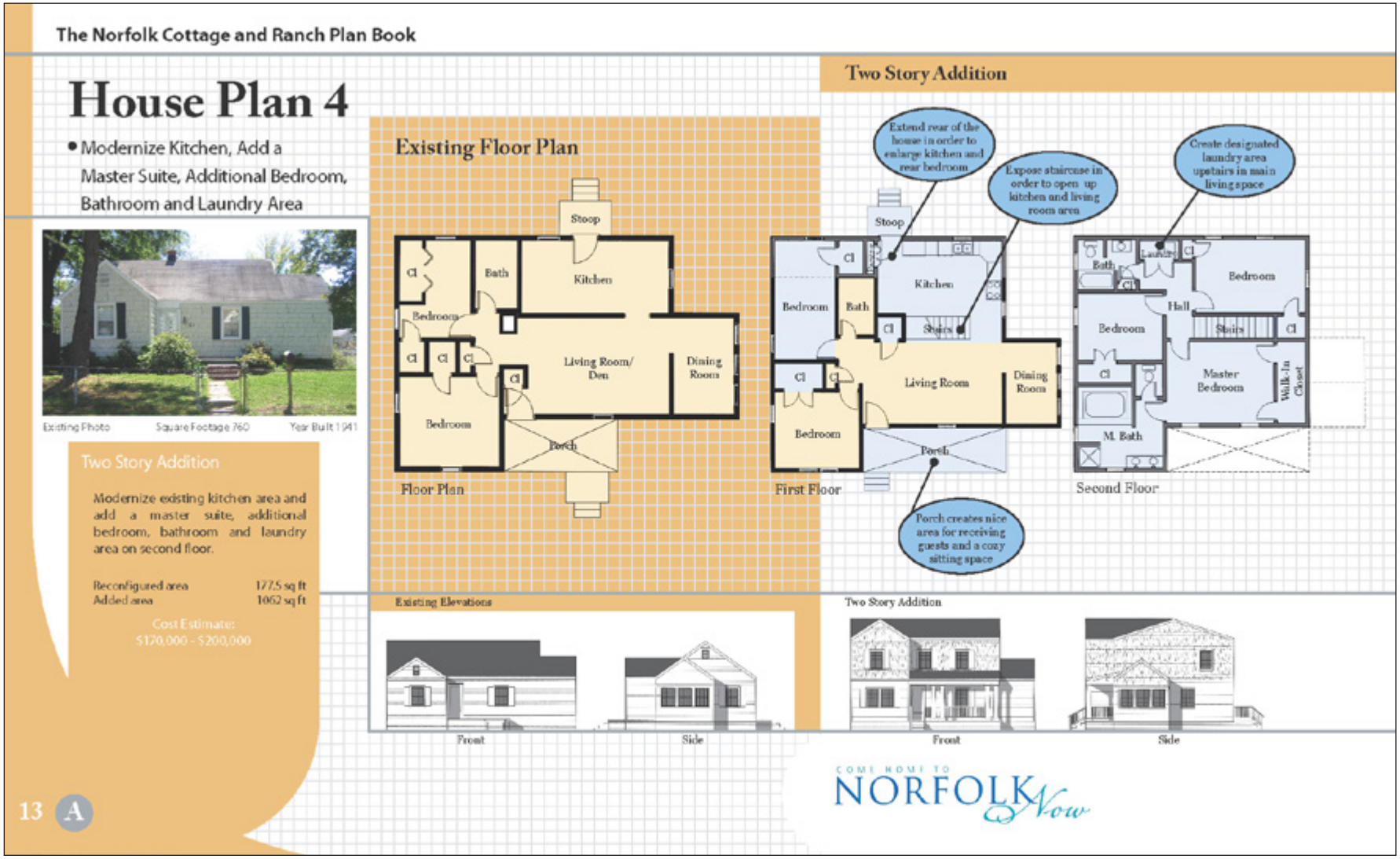


Figure 17: Pages from the design guidelines for the Del Ray neighborhood in Alexandria, VA

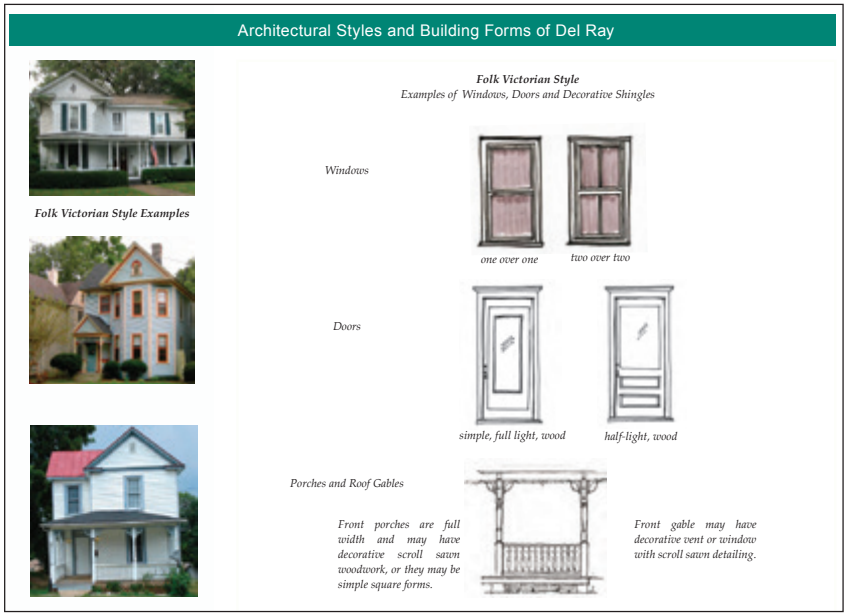


Figure 18: A page from Norfolk's Pattern Book

Zoning Workshop

As the research from other communities reveals, there are few, if any, "one-size-fits-all" solutions. A detailed and thorough re-examination and testing of zoning regulations over a span of time is required. While there is consensus in Princeton that zoning regulations should be tailored to specific residential blocks based on character and other features, there are, nonetheless, many zoning topics that also need to be considered and potentially resolved across all single-family residential districts.

The following list categorizes various zoning controls and features in predominantly single-family residential districts:

- **Volume/Bulk/Massing Controls: building heights**, building height setbacks, stories, attics, basements, cathedral ceilings, **floor area ratio (FAR)**, setbacks, lot sizes, lot coverage
- **Vertical/Facade Features**: **garages**, doors, windows, walls, siding
- **Projecting Features**: **porches**, patios, dormers, decks, chimneys
- **Structures**: **accessory dwelling units**, detached garages, sheds
- **Operational Features**: lighting, parking, signs, **sight triangles**, satellite dishes
- **Landscape Features**: driveways, walkways, **trees**, **yards**, shrubs, fences, water features, impervious/pervious coverage (note: a revised stormwater management ordinance is in the works)
- **Use & Density Controls**: **use** (single, two-family, multi-family), units/per acre

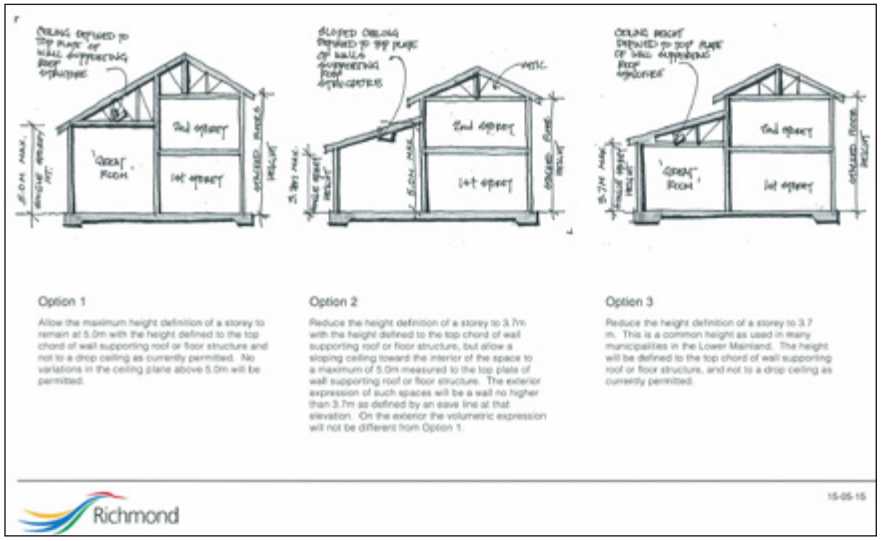
The following pages addresses several key topics within each of these categories that Princeton will need to resolve and provides examples from other communities that could inform remedies and solutions in the single family residential districts. These are highlighted in the list of categories in **green**. In the pages that follow, each of these topics is assigned a certain number of asterisks based on the following criteria:

* Topics that are relatively straightforward and could, therefore, be part of the anticipated second round of "short-term" zoning amendments.

** Topics that might require more architectural testing of outcomes to ensure proper application across all residential zoning districts, or fine tuning to calibrate to varying character within districts (see Figure 19).

*** Topics that might require more vetting through a residential neighborhood visioning process and grounding through an amendment to the Master Plan.

Figure 19: An example of drawing sketches to test the meaning and/or outcomes of several options for defining "story height."



Volume/Bulk/Massing Controls: Building Heights

*Re-examine the Definition of "Building Height"**

The Princeton Township code includes the following definition of "height of building":

The greatest vertical distance between the average level of finished grade along all the exterior walls of a building and each of the following:

(a) The highest ridge of the roof, in the case of a pitched roof;

(b) The highest parapet or cornice level, in the case of a flat roof;

(c) The highest point of any structure that rises wholly or partly above the roof line and whose area together with the area of all other such structures exceeds ten percent of the ground floor area of the building that supports it; excepting, however, structures that constitute or house mechanical equipment for such building; provided, that all the structures that rise wholly or partly above the roof line do not exceed in the aggregate twenty percent of the ground floor area of such building.

The finished grades of depressed courts, to the extent that they are below abutting ground level, shall be disregarded ...

The Borough's definition is similar except that it is measured to the mean level of the slope of the roof for gabled, hip, and gambrel roofs.

The definition is insufficient because the term "average level of finished grade" can lead to houses being built on elevated mounds that are several feet higher than its surroundings. This is not only a character issue but also one that can lead to drainage problems on neighboring properties.

For example, the City of Alexandria includes building height regulations tailored to specific roof types and specifies that height must be measured in certain districts from the lower of the average pre-construction grade or the average finished grade.

Section 2-154 Height of building

(E) In the case of a building with ten feet or less horizontal distance between the building setback line and the right-of-way line, height shall be measured from the average finished grade or the curb grade, whichever is less;

(F) For a building in the R-20, R-12, R-8, R-5, R-2-5, and single-family and two-family dwellings in the RA and RB zones (not including property located within the Old and Historic Alexandria and Parker-Gray Districts), height shall be measured from the average pre-construction grade or average finished grade, whichever grade is lower;

In certain residential zones, the Alexandria had proposed supplemental regulations that govern building height based on an average:

DRAFT Section 7-2300 Supplemental Regulations for Certain Residential Zones

7-2301 Applicability. Unless otherwise indicated below, the supplemental regulations in this section 7-2300 apply to all residential dwellings in the R-20, R-12, R-8,

Figure 20: Example of a house in Princeton built several feet above pre-construction grade.

R-5, R-2-5, RA and RB zones. These regulations supplement the residential zone regulations in Article III of this zoning ordinance.

7-2302 Height in line with existing development.

(A) Whenever the major portion of a block is developed, the height of a residential building erected or altered after [effective date] shall not exceed the greater of: (1) 25 feet, or (2) The average height of the residential buildings built on that block (one side of a street between two intersecting streets or one intersecting street and a street dead end) by more than 20 percent.

The Town of Arlington, MA proposed linking building height to the curb.

Height of Building:

ART. 15, ATM 5/91

The vertical distance of the highest point of the roof above the average grade of the curb line abutting the property. In the R0, R1 and R2 zoning districts where the lot has a slope in excess of five (5) percent, the height is the vertical distance of the highest point of the roof above the average finished grade of the ground adjoining the building as computed before the building is actually erected. This definition excludes penthouses, bulkheads, and other allowable superstructures above the roof line.

*Reconsider Maximum Building Heights, Stories, and Building Height to Setback Ratios****

The Township code has maximum building heights in some residential districts (30 feet in R-6 through R-9) while those without a height requirement (R-1 through R-5) utilize a maximum setback to height ratio. The Borough code includes a maximum building height of 35 feet and a maximum of 3 stories across all residential zoning districts. It also has maximum building heights to setback ratios (ranging from 1.5:1 to 3.0:1) that apply only to side yard setbacks.

Princeton might consider reducing maximum building heights to 32 or 30 feet, reducing the maximum number of stories to 2.5, and instituting a maximum eave height. This would promote the design of sloped roofs over flat roofs and improve the overall consistency of form of new homes. Traditionally, houses in Princeton, have sloped roofs. Several new homes have been built in contemporary styles with flat or nearly flat roofs. This raises the question of how contemporary residential architectural styles and designs comport with the traditional in Princeton's neighborhoods.

According to a 2003 report by the City of Concord, MA, its zoning bylaw restricted building height to 35 feet in residential zoning districts, with height measured to "either the highest point of the exterior in the case of a flat roof or to the mean average finished grade between the plate and the ridge in the case of a pitched roof." Defining height in this way promotes the design of sloped roofs; however, the 35-foot height limit was thought to be excessive in neighborhoods with smaller lots.

To address the "mansionization" of new houses, the City of Newton, MA adopted a definition of building height similar to Concord's and reduced the maximum height from 36 feet to 30 feet. Newton also reduced the maximum number of stories permitted in residential districts from 3 to 2-1/2 stories, allowing a full third story only by special permit. Part of the impetus for this change was to discourage three-story residences in which the first story was primarily used as a garage.

Volume/Bulk/Massing Controls: Floor Area Ratio (FAR)

In Princeton, new single family homes are often built to the maximum size allowable according to the floor area ratio (FAR) of the zoning district. How might Princeton work with FAR to achieve more predictable and contextual results?

*Consider Ways to Limit F.A.R.****

Sea Isle City, NJ recently adopted an FAR cap of 0.8 for single family homes and duplexes (with three parking spaces per unit), intended to curb the trend of building larger and larger homes. In a span of 4 years, approximately 220 new duplexes had been built, many of them built to greater than 0.7 FAR and containing more than 5 bedrooms.

Rather than cap the FAR, the Town of Lexington, MA explored the use of gross floor area (GFA) and linked it to lot area in order to better predict the house size that could be built on a given lot.

Before implementing this change, the Town studied the potential impacts of this rule in terms of financial impacts to propertyowners, (i.e. developers). It found minimal or no impact in terms of potential lost value. Lexington's full analysis can be viewed online at **http://bit.ly/lexmagfa**.

Lexington's intended to recalibrate its existing zoning to better balance market forces with the goals of residents and the Town, enabling it to:

- Better predict the house size that may be built on a given lot;
- Reduce the impacts of redevelopment on neighborhood character;
- Reduce the negative impacts on abutters, like shadows, loss of views, and loss of privacy;
- Slow the reduction of the Town's moderate-sized housing stock;
- Slow the reduction of open space on lots; and
- Better bring Lexington's built housing closer into alignment with the Town's housing.

The Town offers an observation about the complexity of the topic, stating: "there are competing interests: some residents perceive house values will diminish if a gross floor area is instituted while other residents perceive house values will diminish if a gross floor area is not instituted. There is a concern that future tax revenues will not increase at the same rate as now if a gross floor area is instituted, while others claim that the fabric of Lexington's current non-fiscal values will be sacrificed if a gross floor area is not instituted."

The following is the regulatory language Lexington adopted in 2016:

Gross Floor Area. The sum, in square feet, of the horizontal areas of all stories of a building or several buildings on the same lot measured from the exterior face of exterior walls, or from the center line of a party wall separating two buildings. Gross floor area shall also include garages, basements, cellars, porches and half stories, but shall exclude crawl spaces, attics, and decks. Where the text of this bylaw refers to floor area, the term shall mean gross floor area unless the term net floor area is used.

Maximum Allowable Residential Gross Floor Area Table. The total gross floor area of all buildings on a lot containing a one-family or two-family dwelling may not exceed the amount listed in the table below based on lot area.

Lot Area (sq. ft.)	*Max Gross Floor Area*
0 – 5,000	*0.8 * Lot Area*
5,000 – 7,500	*4,000 + 0.55 * (Lot Area – 5,000)*
7,500 – 10,000	*5,375 + 0.23 * (Lot Area – 7,500)*
10,000 – 15,000	*5,950 + 0.2 * (Lot Area – 10,000)*
15,000 – 30,000	*6,950 + 0.16 * (Lot Area – 15,000)*
More than 30,000	*9,350 + 0.16 * (Lot Area – 30,000)*

The Town believes it has found a fair balance among these and other competing issues. The approach accommodates a similar discussion Princeton is having about the financial implications to be considered.

How might introducing limits to F.A.R. impact housing prices in Princeton? Urban Partners examined home sales in Princeton since January 1, 2013 that are in the size range that have been the subject of teardowns—houses ranging from 1,400 sf to 2,400 sf. There have been 375 such sales. 79% of these sales (296) have been to owners occupying the houses, while 21% have been to investors, developers, or others intending to tear down the structures.

The median sales price per square foot for houses occupied by new homeowners is $344/sf, while other purchasers have paid lower prices: $284 to $305/sf. This means that for a typical 2,000 sf house, if it is in good condition, a homeowner will pay about $690,000 to buy it as his or her home. If the house is in less than good condition, owner-occupants will not be as inclined to purchase it, leaving it for investors or developers who will pay a price in the range of $570,000 to $610,000.

This suggests that any loss of home sales demand caused by restrictions on teardown buyers will not likely affect the price received by most home sellers since the highest prices currently being paid are for properties attractive to owner-occupants—the $690,000 house of 2,000 sf in the above example. Again, this represents about 79% of the recent market.

The submarket that might be impacted is the market for the 21% least well-maintained properties, where redevelopers will be discouraged from purchasing these properties as teardowns. Instead, we would expect an increase in the portion of these properties that become rentals. The data above suggests that sellers of those properties (the current teardown properties) might receive $20 less per sf (for the 2,000 sf example, $570,000 instead of $610,000, or $40,000 less) if the residual market for these less well-maintained properties was largely investors.

Overall impacts might include:

- A slight reduction in homeownership rates since some owner-occupants of larger homes constructed after teardown would no longer be replacing homes that investors would rent.
- Some increase in availability of rental homes.
- Some increase in demand for existing larger houses as the buyers of the replacement houses would now compete for the better-maintained existing product.
- The potential for a "reach" market for "handy" less affluent homebuyers: people getting to Princeton by buying a property in less well-maintained condition for them to fix up themselves. This, however, may be a tiny market, maybe one more buyer of this type annually.

A key issue is that these restrictions will only impact the value of the 21% of homes in less positive condition. However, many of these lots are quite large. A 4,500 sf home would still be under 0.25 FAR on more than half of the lots where teardowns have occurred in the past four years.

Vertical/Facade Features: Garages

*Regulate Garage Prominence on Front Facades**

Residents lament the design of new houses with garages facing the street and point to several egregious examples of "snout houses" where garages protrude out and dominate the appearance of the front facade.

The City of Pacific, WA actually defines in its zoning code the term "snout house" and regulates the protrusion of garages. In Chapter 20.94 its code, it states:

A. A "snout house" is a residence constructed with the front door wall more than eight feet behind the front of the garage door, except as permitted in these regulations.

In 2016, the City of Newton, MA revised its garage ordinance to reduce the appearance of "snout houses." Unlike the City of Pacific, WA, however, the revisions address both dimensions: garage coverage of the front facade and garage setback/protrusion, without needing to define "snout houses."

Figure 21: Examples of "snout houses" in Princeton.

3.4.4. Garages

B. For each dwelling unit there shall be no more than 1 garage and a garage shall provide for no more than 3 automobiles, except by special permit.

C. Where more than one garage is provided as part of a building and they are placed side-by-side, there shall be living area connected by a shared wall above both garages.

D. Garage setback. A garage wall may be no closer to the front lot line than the longest street-facing wall of the dwelling unit measured at ground level.

E. Garage Dimensions.

1. The length of a garage wall facing a street may be up to 40 percent of the total length of the building parallel to the street, inclusive of the garage wall, or 12 feet, whichever is greater. This requirement does not apply to detached garages.

2. On corner lots, only one street-facing garage wall must meet the standard above.

3. The ground floor area of an accessory building containing a garage or an attached garage shall not exceed 700 square feet, except by special permit.

Newton's code also includes exemptions to these standards based on irregular lot size, topography, preservation of mature trees, etc.

It is important to remember that one residential area in Princeton, focused around Clover Lane, was constructed during the 1950s with homes of a similar architectural style that included carports instead of enclosed garages. Also, there is at least one new house built in Princeton with a carport instead of a garage, which could be a logical solution for building on a smaller lot.

Projecting Features: Porches

*Consider Design Guidelines to Complement Zoning***

Porches are a common features of many older houses built in Princeton and, therefore, are an important element of the character of many neighborhoods. To promote the construction of porches, Princeton adopted the following zoning code into the Township and Borough codes:

A. These regulations shall apply to all single family and two family homes.

1. Porches:

a) Roofed porches may encroach into the front setback a maximum of 8' provided the porch does not exceed 200 square feet and the majority of the structures on the block have roofed porches that encroach on the front setback area. Porches which encroach into the front setback may not have a second floor, balcony, deck or be enclosed on all sides.

These regulations permit roofed porches to be constructed a certain distance beyond the front yard setback and control for size and other features. It is important to note that porches are not only "projections," but can be intrinsic features of many homes. Furthermore, they can be constructed within the front yard setback in a variety of ways (see Figure 22). Porches can be regulated generally in zoning, but they can be further promoted and shaped contextually by design guidelines.

Figure 22: A new house in Princeton with porch

Structures: Accessory Dwelling Units

*Gauge Resident Interest in Accessory Dwelling Units****

One of the more popular zoning trends in communities across the country is the promulgation of regulations for permitting accessory dwelling units (ADUs). An ADU, also known as accessory apartments or granny flats, is an additional living quarter on a single-family lot that is a separate structure from the primary house on the lot, with its own living space, kitchen, and bathroom.

Princeton has ordinances in place that permit roomers and flats within existing single family houses (Sec. 10B-273 and 10B-274), but it does not currently have any rules governing ADUs. Given interest in maintaining the affordability of Princeton, ADUs might appeal to some residents. Clearly, ADUs would not be feasible in certain neighborhoods because of small lot sizes and other potential limitations such as inadequate drainage or space for parking, but they might be more feasible where lots are larger.

Some towns, such as the Borough of Old Tappan, NJ in Bergen County, permits ADUs specifically for senior citizens (age 62+). The Borough permits ADUs on lots with an area of at least 10,000 sq. ft.

This topic should be introduced in any visioning process for the future of Princeton's residential neighborhoods.

Operational Features: Sight Triangles

*Ensure Unobstructed Sight Triangles**

The ZBA recommends for safe traffic and pedestrian negotiation of street junctions and driveway sight triangles that provide unobstructed views for a person seated in a car at such intersections.

NJ's Residential Site Improvement Standards (RSIS) defines "sight triangle" as:

A triangular-shaped portion of land established at street intersections in which nothing is erected, placed, planted, or allowed to grow in such a manner as to limit or obstruct the sight distance of motorists entering or leaving the intersection.

This definition refers specifically to intersections consisting of streets, but not at intersections consisting of a public street and a private driveway. NJ municipalities typically have sight triangle requirements at corner lots which, by nature, are usually located at the intersection of two public streets. The Borough has a site triangle ordinance (Sec. 17A-379) that calls for clear site triangles at all street intersections and corner lots in districts R-1 through R-4.

In terms of driveways of single family homes and street intersections, there does not appear to be any regulatory mechanism to enforce this. Typically this would be part of site plan review, but this is not permitted for the development of a single family home in NJ.

The Township of Mahwah, NJ's code demonstrates this:

Sight triangle shall mean a triangular shaped easement established at the intersection of two street or a driveway and a street in which nothing shall be erected, placed, planted or allowed to grow in such a manner as to obstruct vision between a height of 2' 6" inches above the center-line grade of the street or driveway. The Township shall have the right of entry to remove any obstruction to vision within the sight easement area to conforming to the standards of this definition following due notice to the property owner. The triangle shall be determined along such street lot lines or edge of driveway 30 feet distant from their joint intersection.

This sight triangle definition/regulation shall not apply to single family residential lots except for corner lots at the junction of and abutting on two or more intersecting streets.

Landscape Features: Driveways

*Consider Requiring a Permit for Driveways**

Some NJ towns have a separate permitting process for driveways, which offers the opportunity to maintain clear sight triangles and identify other issues. For example, Washington Township, NJ requires a driveway permit. For single-family dwellings, the required drawing can be prepared by the applicant. For all other driveways, including common driveways, the drawings must be prepared by a professional engineer. The full ordinance can be viewed online at **http://ecode360.com/11396468**.

*Permit and Encourage Shared Driveways***

Houses in parts of Princeton were built close together; some pairs of them have shared, or common, driveways. The Township code currently encourages shared driveways, where appropriate, for flag lots. Shared driveways should be permitted and encouraged in residential districts with the intention of reducing impervious surface coverage and enabling the development of new houses where lots are especially narrow. Standards should be developed to ensure that shared driveways are appropriate and safe and that easements and maintenance agreements are coordinated.

Landscape Features: Trees & Yards

The natural landscape features of yards can be an important contributor to the character of residential blocks. When mature trees and shrubs are removed during the process of preparing a lot for a new house, the result can be visually dramatic. Furthermore, removing trees, shrubs, and lawns can adversely impact the local stormwater drainage system.

*Strengthen Tree and Yard Protections**

Princeton has an ordinance in place governing the removal of certain trees from private property that includes a permit process and tree replacement standards.

Sec. 22-11. Trees requiring permit before removal.

It shall be a violation of this article for any person to remove or otherwise destroy any tree as set forth in this section, or to cause or permit the same to be done by any third party contractor or subcontractor, without first obtaining a permit or approval as provided herein below. Except as otherwise provided in section 22-12 below, the following acts are hereby regulated and shall require a tree removal permit:

(a) Removal of or otherwise destroying a tree with a DSH of eight inches or more;

(b) Removal of or otherwise destroying an ornamental or evergreen tree with a height of ten feet or more;

(c) Removal or otherwise destroying a tree with a canopy extending over a public right-of-way; and

(d) Removal of or otherwise destroying any specimen or significant tree, as defined in section 22-2 above.

Princeton's enforcement officer can grant or deny a requested permit for tree removal based on the following:

a. Whether the removal or destruction of the tree or trees will cause or contribute to physical or environmental problems on the land and other property, including but not limited to flooding, soil instability and erosion.

b Whether the destruction or removal of the tree or trees will

Figure 23: Mature trees with broad canopies are a distinct feature of some of Princeton's neighborhoods

Figure 24: During construction of new homes, such as this one in Princeton, landscaping and trees are typically cleared

have a negative impact on the contiguous canopy or on the growth and development of the remaining trees on the land and other property.

c. Whether the destruction or removal of the tree or trees will have negative aesthetic or visual impact on the land and other property.

d. Whether the destruction or removal of the tree or trees will threaten or otherwise lead to a loss of wildlife habitat or tree species.

e. Whether the tree or trees are specimen or significant tree(s) as defined in section 22-2 above.

f. Whether the destruction or removal of the tree or trees is proposed to take place in an area identified by the New Jersey Department of Environmental Protection as a riparian buffer zone.

g. Whether the destruction or removal of the tree or trees is a part of an overall landscape plan for the property.

h. Whether a denial of the permit, in whole or part, would cause an undue hardship on the applicant.

i. Whether the application includes a tree replacement plan which will mitigate the negative impact that the tree removal or destruction will have on the land and other property.

Princeton could consider providing more standards or guidance for protecting trees and roots during construction. For example, the City of Charlottesville, VA offers guidance through its Best Management Practices for Tree Preservation, Transplanting and Removal. The organization Sustainable Jersey recommends a comprehensive level of tree protection identifying wooded areas deserving protection in Master Plan goals and maps and linking them with tree preservation ordinances.

Use & Density Controls

*Gauge Interest in Introducing Duplexes into Some Residential Areas****

The concept of introducing duplex housing types within single family neighborhoods was raised several times during the public engagement process for this initiative as a means to potentially provide housing at a lower price point and smaller size than a typical newly-constructed single family house in Princeton. This concept should be vetted and evaluated during any visioning process for the future of Princeton's residential neighborhoods. The idea of the "missing middle" was introduced in the Engagement Summary chapter of this report, as was the example of the City of Austin, TX, which allows duplexes as an option in neighborhoods where the concept is supported by residents.

The City of Portland, OR created the Residential Infill Project as a way to methodically consider ways to shape its residential neighborhoods in order to meet future housing needs. The city is considering, among other methods, establishing a Housing Opportunity Overlay Zone that would allow more housing types (e.g., duplexes, ADUs) in selected areas near centers and corridors with good access to neighborhood services. Information on Portland's Residential Infill Project can be viewed online at **https://www.portlandoregon.gov/bps/67728**.

The architecture community in the Pacific Northwest has been particularly responsive to this trend, developing prototypes of duplexes that are designed fit neatly into a single family setting (see Figure 25).

Of course, duplexes are not only a contemporary housing type. They are integral to older neighborhoods in many cities, including Princeton (see Figure 26).

Figure 25: A prototype of a "stacked duplex" (by Bruinier & Associates, Inc. of Portland, OR)

Figure 26: A historic duplex in Philadelphia (photo by Eli Pousson)